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10/667,194	09/16/2003	Chris Stolte	061127-0005US	7148

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MORGAN, LEWIS & BOCKIUS, LLP.  
2 PALO ALTO SQUARE  
3000 EL CAMINO REAL  
PALO ALTO, CA 94306

EXAMINER
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FILIPCZYK, MARCIN R

ART UNIT	PAPER NUMBER
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2163

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/667,194

Applicant(s)

STOLTE ET AL.

Examiner

Marc R. Filipczyk

Art Unit

2163

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-90 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 9, 15-20, 22-35, 37, 38, 44-49, 51-64, 66, 67, 73-78 and 80-90 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Response to Amendment***

This Action is responsive to Applicant's amendment submitted on 10/29/2007.

Claims 1-6, 8, 9, 15-20, 22-35, 37, 38, 44-49, 51-64, 66, 67, 73-78 and 80-90 are pending.

To expedite the process of examination Examiner requests that all future correspondences in regard to overcoming prior art rejections or other issues (e.g. amendments, 35 U.S.C. 112, objections and the like) set forth by the Examiner that Applicants provide and link to the most specific page and line numbers of the disclosure where the best support is found (see 35 U.S.C. 132).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Or,

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 8, 9, 15-20, 22-35, 37, 38, 44-49, 51-64, 66, 67, 73-78 and 80-90 are rejected under 35 U.S.C. 102(e) as being anticipated by Barg et al (U.S. Patent No. 6,707,454).

Regarding claims 1, 30 and 59, Barg discloses a method and system of forming a visual plot using a hierarchical structure of a dataset, wherein said dataset comprises a measure attribute and a dimension attribute the dimension consisting of a plurality of levels the plurality of levels forming a dimension hierarchy and the dimension attribute comprising a plurality of levels that have a natural hierarchical order (fig. 11 and col. 2, lines 15-24, 47-54 and abstract), comprising:

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(A) constructing said visual plot based on a specification, wherein a first level from said plurality of levels is represented by a first component of said visual plot and wherein a second level from said plurality of levels is represented by a second component of said visual plot (col. 5, lines 53 to col. 6, line 60), wherein the specification defines a mapping from said dataset to said visual plot (figs. 2, 6 and 7);

(B) querying said dataset to retrieve data in accordance with said specification, said data including all or a portion of said dimension and all or a portion of said measure attribute (fig. 7, item 712, *query*); and

(C) populating said visual plot (figures 4, 7 and 29) with said retrieved data in accordance with said specification (fig. 29), by associating a plurality of levels with axis (fig. 24 and col. 26, lines 9-51, see also col. 2, lines 22-25) wherein said first and second axis are oriented in different directions in a space occupied by said visual plot such that said first level and said second level are displayed independently from said natural hierarchical order (figs. 6, 7 and 29, item 518, col. 15, lines 55-67 and col. 16, lines 1-36).

*(Note: when a dimension is swapped from a column to a row its natural hierarchy is modified)*

Regarding claim 2, said dataset is a database (abstract).

Regarding claims 3 and 88 wherein said querying said dataset to retrieve data in accordance with said specification comprises querying the database to retrieve a set of tuples in accordance with said specification (fig. 7).

*(Note: tuples are records)*

Regarding claim 4, said visual plot comprises a plurality of panes and said populating said visual plot with said retrieved data in accordance with said specification comprises associating all or a subset of said set of tuples with a pane in said plurality of panes (fig. 10).

Regarding claim 5, encoding a tuple in said subset of tuples in said pane as a graphic (fig. 10).

Regarding claim 6 wherein said specification is in a language based on the hierarchical structure of the dataset (col. 2, lines 15-25).

Regarding claim 8 wherein said first component is said plurality of rows and said second component is said plurality of columns (col. 5, lines 44-52).

Regarding claim 9 wherein each row in said plurality of rows or each column in said plurality of columns is assigned a different color or hash pattern (col. 5, lines 44-52).

Regarding claim 15 wherein said set of levels represent the levels month, quarter, and year and said set of levels consist of the levels month and year (spread sheet).

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Regarding claim 16 wherein a set of levels from said dimension are represented by said first component, said set of levels are represented in said first component of said visual plot in an order that deviates from an order in said dimension hierarchy (col. 2, lines 15-24).

Regarding claim 17 wherein said retrieved data is represented in text form, as a bar chart, or as a scatterplot in said visual plot (fig. 7, 612 and related text).

Regarding claim 18 wherein said specification comprises an algebraic expression that includes an operand, wherein said algebraic expression represents an operation on said hierarchical structure of said dataset (col. 13, lines 48-63).

Regarding claim 19, said specification organizes said visual plot into a plurality of rows and a plurality of columns; and said specification comprises a first algebraic expression for said plurality of rows and a second algebraic expression for said plurality of columns and wherein at least one of said first algebraic expression and said second algebraic expression represents an operation on said hierarchical structure of said dataset (fig. 7 and col. 13, lines 48-63).

Regarding claim 20 wherein said specification further organizes said plurality of panes into a plurality of layers, said specification further comprises a third algebraic expression for said plurality of layers, and said third algebraic expression represents an operation on said hierarchical structure of said dataset (fig. 4 and fig. 7 and col. 13, lines 48-63).

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Regarding claim 22 wherein said first component represents a first level of said dimension hierarchy and a measure such that said measure is partitioned into a plurality of segments, each segment in said plurality of segments representing a data point in said first level; and said second component represents at least a second level of said dimension hierarchy (fig. 29 and col. 2, lines 47-54).

Regarding claim 23 wherein said dimension is time (col. 2, lines 15-24).

Regarding claim 24 wherein each data point in said first level represents a predetermined time period (col. 2, lines 15-24).

Regarding claim 25 wherein said predetermined time period is one of a year, a quarter, a month, a week, a day, an hour, a minute, or a second (col. 2, lines 15-24).

Regarding claim 26 wherein each segment in said plurality of segments is assigned a different color or a different hash pattern (col. 5, lines 44-52).

Regarding claim 27 wherein said first component represents a level of detail of a graphic, said second component is represented on a first axis, and said second axis represents a measure (fig. 24).

Regarding claim 28 wherein said graphic is partitioned into a plurality of segments in accordance with said level of detail such that each segment of said plurality of segments is assigned a different color or a different hash pattern and each segment of said plurality of segments represents a different data point in the second level of said dimension hierarchy (fig. 11 col. 5, lines 44-52).

Regarding claim 29 wherein said first level is year and said second component is month (col. 2, lines 15-24).

Regarding computer program and system claims 30-35, 37, 38, 44-49, 51-64, 66, 67, 73-78 and 80-87, 89 and 90 comprise same subject matter as method claims rejected above respectively, and are therefore rejected on the same basis.

### ***Response to Arguments***

Applicant's arguments filed May 18, 2007 have been fully considered but they are not persuasive. The arguments and responses are listed below.

Applicant argues on pages 15 and 16 that prior art Barg does not teach spreading two levels of a dimension attribute onto two different layers or axes of a single visual plot.

Examiner disagrees. Barg discloses that a row dimension may be changed or swapped to a column dimension (figs 6, 7 and col. 16, lines 1-36). As such, manipulating of rows and columns is clearly taught by Barg.



With respect to all the pending claims, Examiner respectfully traverses Applicants assertion based on the discussion and rejection cited above.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc R. Filipczyk whose telephone number is (571) 272-4019. The examiner can normally be reached on Mon-Fri, 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MF  
December 26, 2007



WILSON LEE  
PRIMARY EXAMINER